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THE LARGEST WHITE LIGHT FLARE EVER OBSERVED: 25 APRIL
1984, 0001 UT

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TJ483023

D. F. Neidig (AFGL/Sacramento Peak), H. Grosser (Univ.
Sternwarte, Göttingen), and A. L. Kiplinger (NASA/GSFC and
STX)

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The X13/3B flare of 25 April 1984, 0001 UT, was accompanied by intense white light emission that reached a peak power output $\sim 2 \times 10^{29}$ erg s⁻¹ in the optical/near UV continuum; the total energy radiated in the continuum alone approached 10^{32} erg. This was the most powerful white light flare yet recorded, exceeding the peak output of the largest previously known event by more than one order of magnitude. The flare was a two-ribbon type with intense embedded kernels as observed in both Balmer-alpha line and Balmer continuum, and each of these flare ribbons covered separate sunspot umbrae shortly after the maximum of the event. The onset and peak of the white light emission coincided with the onset and peak of the associated $E > 100$ KeV hard X-ray burst, while the 1-8A soft X-ray emission reached its maximum 4 minutes after the peak in white light.